

## WEST Search History

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*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

L5	(134/56R OR 134/113 OR 134/166R OR 134/169R OR 134/170).CCLS. and L4	4	L5
L4	L1 and cleaning	290	L4
L3	L2 and cleaning	3	L3
L2	L1 and (coordinate measurement machine)	29	L2
L1	measurement probe	3885	L1

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 4 of 4 returned.**☐ 1. Document ID: US 20030062063 A1

L5: Entry 1 of 4

File: PGPB

Apr 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030062063  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030062063 A1

TITLE: Device and method for removing build-up on measurement gauges

PUBLICATION-DATE: April 3, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sandu, Constantine	Tustin	CA	US	
Popa, Liviu V.	Garden Grove	CA	US	
Mercurio, John J.	Rossford	OH	US	

US-CL-CURRENT: 134/1; 134/104.1, 134/113, 134/166R, 134/22.11, 134/6

## ABSTRACT:

The present invention is directed to a device and method for removing build-up on such measurement gauges. The inventive device and method involve a movable scraper that fits around a cylindrical shield of a measurement gauge and continuously removes the build-up on the shield. Movement of the scraper is accomplished by a magnetic coupling between a magnetic core attached to the scraper, which is inside a pipe or other piece of equipment, and solenoids that are installed on the outside of the pipe. The device and method of the invention ensure instantaneously correct readings from the measurement gauge and improve control and operation strategies of heat exchanges, with significant economic advantages.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIG	Draw Desc	Image
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☐ 2. Document ID: US 6014994 A

L5: Entry 2 of 4

File: USPT

Jan 18, 2000

US-PAT-NO: 6014994  
DOCUMENT-IDENTIFIER: US 6014994 A

TITLE: Plant for cleaning a filling plant

DATE-ISSUED: January 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schmidt; Michael G.	Wiesbaden			DE

US-CL-CURRENT: 141/89; 134/170, 134/99.2, 141/91

## ABSTRACT:

The operation of filling plants for filling drinks or other foods is subject to stringent regulations under the law on foodstuffs. In this connection, an essential aspect is the cleanness of the filling plant, which consists of a filler and a conveyor. To clean a filling plant, it is known to provide four separate cleaning systems with four separate supply stations and control systems as well as line systems.

The invention provides, for all partial cleaning systems in a common central cleaning circuit (40a, 57), a common supply station (10) comprising the components

fresh water container (12)

storage containers (13-16)

heating station (29)

dosing station (27),

which can selectively be connected to or disconnected from the cleaning circuit by means of valves and rotary valve flaps, as well as a programme control system (11) as well as a common partial line system.

10 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMC	Draw Desc	Image
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☐ 3. Document ID: US 5958148 A

L5: Entry 3 of 4

File: USPT

Sep 28, 1999

US-PAT-NO: 5958148

DOCUMENT-IDENTIFIER: US 5958148 A

TITLE: Method for cleaning workpiece surfaces and monitoring probes during workpiece processing

DATE-ISSUED: September 28, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Holzapfel; Paul	Tempe	AZ		
Yednak, III; Andrew	Phoenix	AZ		
Natalicio; John	Los Angeles	CA		
Goudie; Chad	Chandler	AZ		

US-CL-CURRENT: 134/18, 134/113, 134/2, 134/26, 134/34, 134/37, 216/38, 257/E21.528, 257/E21.53, 451/6

## ABSTRACT:

The present invention provides methods and apparatus which permit the in-process, in-situ, substantially real time measurement of the actual thickness of a surface layer of a workpiece, e.g., a semiconductor wafer. A probe is disposed proximate the outer perimeter of a polishing pad on a CMP table such that the probe establishes optical contact with the wafer surface as a portion of the wafer extends beyond the outer perimeter of the polishing pad. A reflected signal received by the probe is analyzed to calculate the thickness of the surface layer. Alternatively, the reflective characteristics of the semiconductor layers may affect the nature of the reflected signal; changes in the reflected signal can be detected to indicate when a metallic

layer has been removed from an oxide layer. In accordance with another aspect of the present invention, a nozzle assembly having a plurality of fluid outlets may be provided to apply a stream of deionized water at the surface under inspection to thereby remove excess slurry and debris from the local region of the workpiece being inspected. A second fluid nozzle may be provided to apply a stream of deionized water to the tip of the probe tip to thereby clean the probe tip between endpoint detection cycles. The nozzle assembly may also include a third fluid nozzle for applying a stream of nitrogen gas to thereby deflect debris away from the probe tip during the endpoint detection procedure and a fourth fluid nozzle for applying a stream of nitrogen gas to thereby remove water and debris from the probe tip during the endpoint detection procedure.

11 Claims, 19 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 4. Document ID: US 4307741 A

L5: Entry 4 of 4

File: USPT

Dec 29, 1981

US-PAT-NO: 4307741  
DOCUMENT-IDENTIFIER: US 4307741 A

TITLE: Probe cleaner

DATE-ISSUED: December 29, 1981

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rossi; Gregory R.	Valparaiso	IN		

US-CL-CURRENT: 134/100.1; 134/103.2, 134/113

ABSTRACT:

Apparatus for an automatic system for cleaning a process monitoring probe inserted into a process stream for monitoring said stream. The apparatus comprises a flushing water supply, a high pressure water jet mixed with a cleansing agent and sequential timing apparatus for selectively applying the water jet to the process monitoring probe.

3 Claims, 4 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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Term	Documents
134/56R	434
134/56RS	0
134/113	560
134/113S	0
134/166R	605
134/166RS	0
134/169R	421
134/169RS	0
134/170	351
134/170S	0
(((134/170 OR 134/169R OR 134/56R OR 134/113 OR 134/166R).CCLS.) AND 4).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	4
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